Ministry of Health of the Russian Federation

 Federal State Autonomous Educational Institution of Higher Education

I.M. Sechenov First Moscow State Medical University

(Sechenov University)

“Approved”

Academic council of FSAEI HE

I.M. Sechenov First Moscow

State Medical University

(Sechenov University)

“\_\_\_\_\_” of \_\_\_\_\_\_\_\_\_\_\_ 20\_\_\_

Protocol №\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Training educational program

THERAPEUTIC DENTISTRY

Basic professional educational program of higher education – specialty program

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_31.05.03 Dentistry \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2019-2020 year of admission

Labour intensity \_\_\_\_\_\_\_\_\_\_21,0\_\_\_\_\_\_\_\_\_\_ credits

Министерство здравоохранения Российской Федерации

Федеральное государственное автономное образовательное учреждение

высшего образования

**ПЕРВЫЙ МОСКОВСКИЙ ГОСУДАРСТВЕННЫЙ МЕДИЦИНСКИЙ УНИВЕРСИТЕТ имени И.М.СЕЧЕНОВА**

**(Сеченовский Университет)**

Утверждено Ученый совет ФГАОУ ВО Первый МГМУ им. И.М.Сеченова Минздрава России «\_\_\_\_\_\_»\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_20\_\_\_\_ протокол № \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Training educational program

THERAPEUTIC DENTISTRY

основная профессиональная образовательная программа высшего образования –

программа специалитета

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*указывается код и наименование укрупненной группы специальностей (направлений подготовки)*

 \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_31.05.03 Стоматология \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*указывается код и наименование направления подготовки (специальности)*

Год зачисления 2019-2020

Трудоемкость дисциплины \_\_\_\_\_\_\_\_\_\_21,0\_\_\_\_\_\_\_\_\_\_ зачетных единиц

**1. Goals and objectives of mastering the discipline Therapeutic dentistry (further – discipline).**

*The goal of mastering the discipline*: medical training of a specialist, having deep theoretical knowledge and being able to provide dental care to the patients with diseases of teeth, periodontium and oral mucosa.

*The objectives of mastering the discipline*:

- mastering the diagnostic methods used for examination of patients with diseases of teeth, periodontium and oral mucosa;

- knowing the indications for conservative treatment of patients with diseases of teeth;

- mastering the treatment planning for patients with diseases of teeth;

- formation of theoretical knowledge and manual skills in conservative treatment of patients with diseases of teeth hard tissues, pulp and periodontium;

- training in prophylaxis, diagnosis and treatment of complications occurring in treatment of teeth, pulp and periodontium diseases;

- getting of new theoretical knowledge in periodontology;

- knowing of actual aspects of periodontal diseases etiology and pathogenesis;

- mastering the basic diagnostic and treatment methods of periodontal diseases;

- knowing the main complications occurring during periodontal treatment and methods of their correction;

- knowing the main principles of organization of periodontology clinical department;

- knowing the main principles of asepsis, antisepsis and ergonomics in the department of periodontology;

- knowing of principles of filling out medical history forms during periodontal care;

- formation of manual skills, which are necessary for independent work of periodontologist in ambulant clinic, providing periodontal care according to principles of ethics and deontology;

- formation of skills in periodontal diseases treatment planning considering the surgical stage;

- knowing the actual methods of periodontal diseases surgical treatment;

- formation of theoretical knowledge and practical skills in conservative treatment of patients with diseases of oral mucosa in ambulant clinic;

- training in prophylaxis, diagnosis and treatment of complications occurring in treatment of oral mucosa diseases;

- mastering of examination and treatment of elderly patients.

***As a result of discipline mastering students must:***

***know:***

- development of oral and maxillofacial structures;

- classification, etiology, pathogenesis of diseases of teeth, periodontium and oral mucosa;

- examination, diagnosis, treatment and prophylaxis of caries and non-carious lesions;

- causes and prophylaxis of complications occurring during treatment of caries and non-carious lesions;

- errors in treatment of caries and non-carious lesions, causes, prophylaxis and correction;

- use of different types of restorative materials in treatment of caries and non-carious lesions

- classification, etiology and pathogenesis of endodontic diseases;

- methods of endodontic treatment;

- causes and prophylaxis of complications occurring during endodontic treatment;

- errors in endodontic treatment;

- histology and physiology of periodontium;

- classification, etiology, pathogenesis of periodontal diseases;

- examination of patients with periodontal diseases, diagnosis of periodontal diseases;

- principles and methods of complex periodontal diseases treatment, including conservative and surgical methods, rehabilitation and prophylaxis;

- doctor’s duties in emergency aid;

- principles of medical history filling;

- population groups for prophylactic examination;

- assessment of treatment quality;

- histology and physiology of oral mucosa;

- classification, etiology, pathogenesis of oral mucosa diseases;

- examination of patients with oral mucosa diseases, diagnosis of oral mucosa diseases;

- treatment methods and medication for oral mucosa diseases,

- errors and complications in oral mucosa treatment;

- oral health status of elderly and senile patients.

***Be competent to:***

- create an examination plan for patient with diseases of teeth, periodontium and oral mucosa;

- use additional methods of examination;

- confirm a diagnosis;

- create a treatment plan for patient with diseases of teeth, periodontium and oral mucosa;

- detect and correct errors and complications occurring during treatment of caries and non-carious lesions;

- treat caries and non-carious lesions using non-invasive, minimal-invasive and invasive methods;

- perform tooth restoration;

- detect the causes of endodontic diseases;

- create a treatment plan for patient with endodontic diseases;

- chose the method of root canal preparation and obturation;

- detect and correct errors and complications occurring during endodontic treatment;

- assess periodontal status of the patients with systemic diseases and pathological processes;

- interpret the laboratory results and instrumental tests;

- confirm the plan of patient examination including physicians’ consultations;

- confirm the optimal treatment plan, prescribe medication considering drugs pharmacodynamics, pharmacokinetics and adverse effects;

- provide the urgent care for patients with acute inflammatory process in periodontium;

- confirm the treatment plan for patients with oral mucosa diseases including physicians’ consultations;

- oral mucosa diseases management in different age patient;

- prevent oral mucosa diseases prevention, provide enlightenment work with patients;

- provide dental treatment for elderly patients.

***Demonstrate the following skills:***

- dental patient examination;

- non-invasive caries treatment (remineralizing therapy, infiltration);

- invasive caries treatment (cavity preparation and filling);

- non-carious lesions management;

- vital and non-vital bleaching;

- pulp-saving pulpitis management;

- non-vital pulp extirpation;

- vital pulp amputation and vital pulp extirpation;

- acute and chronic apical periodontitis management;

- endodontically treated teeth restoration;

*-* non-vital teeth bleaching;

- medical history taking from patient with periodontal disease;

- general health status assessment;

- laboratory tests and instrumental examination data interpretation;

- assessment of treatment and prevention efficacy in patients with periodontal diseases;

- dental deposits removal with manual instruments and special devices;

- oral mucosa lesions management including irrigation, application and injection of drug preparation;

- palpation of lymph nodes and oral mucosa;

- taking bioptic material for cytological and histological investigation (shave biopsy and punch biopsy).

**2. Place of the Discipline in the structure of University Educational Program**

**2.1. The Discipline is a part of Educational Unit С.3.18 Dentistry**

**2.2. For mastering the Discipline are necessary for knowledges, abilities and skills, obtained from previous disciplines:**

*- Human anatomy – head and neck anatomy*

*(discipline/practice)*

Knowledge: *anatomical, physiological, age- and gender-associated features of human organism, human body development and growth;*

Competences: *use educational and scientific literature for professional goals;*

Skills: *palpation of main bone structures, mussels and lymph nodes, description topography of human organs, vascular and nerve trunks;*

*-Histology, embryology, cytology – oral cavity histology*

*(discipline/practice)*

Knowledge: *cells’, tissues’ and organs’ structure, physiology and development; cells and tissues examination methods and techniques;*

Competences: *use educational and scientific literature for professional goals; use of laboratory equipment;*

Skills: *analyze histological and physiological condition of human cells, tissues and structures, assess results of cytological and histological studies;*

*-Operative dentistry*

*(discipline/practice)*

Knowledge: *dental office organization and equipment; basic methods of dental patient examination; dental instruments for examination, dental deposits removal, cavity preparation and filling and for endodontics; bases of cavities preparation, basis of endodontics;*

Competences: *use educational and scientific literature for professional goals; use of dental instrumentation and equipment;*

Skills: *dental deposits removal, carious cavity preparation and filling, root canal instrumentation and filling;*

 2.3. Mastering the discipline is necessary for knowledge, abilities and skills, formed by following disciplines:

*- post-graduate course of restorative dentistry*

*(discipline/practice)*

Knowledge: *etiology, pathogenesis, treatment and prevention of main oral diseases;*

Competences: *use educational and scientific literature for professional goals;*

Skills: *modern treatment methods of caries, non-carious lesions, endodontic diseases, periodontal diseases and oral mucosa diseases*

**3. Demands for results of mastering the discipline**

 The goal of mastering the discipline is formation of following professional competences (PC):

|  |  |  |  |
| --- | --- | --- | --- |
| № | Code of PC | Content of PC | As the result of mastering the discipline students must: |
| Know | Be competent | Have skills | Assessment tools\* |
|  | PC-5 | Readiness for collection and analysis of patient complaints, data his/her history, examination results, laboratory, instrumental, post-mortem and other studies in order to recognize the condition or the presence or absence of dental disease  | Basic and additional examination methods | Collect and interpret data from questioning, examination, lab-test and instrumental examination and bioptic material  | Basic and additional examination methods | Questioning, test |
|  | PC-6 | Ability to determine the patients’ basic pathological conditions, symptoms, syndromes, dental diseases, clinical entities, in accordance with the International Statistical Classification of Diseases and problems related to health (ICD).    | Pathological conditions, symptoms, syndromes, dental diseases, International Statistical Classification of Diseases and problems related to health (ICD). | Detect in patients main pathological conditions, symptoms, syndromes, dental diseases, using knowledge of medical, biological and clinical disciplines and confirm the diagnosis in ICD codes. | Main diagnostic procedures for detecting pathological conditions, symptoms, syndromes, dental diseases.  | Questioning, test |
|  | PC-8 | Ability to determine the treatment plan for patients with different dental diseases. | Basic principles and methods in dental diseases treatment. | Determine the complex treatment plan, prescribe medications, asses current treatment efficacy and safety.  | Dental diseases treatment methods. | Questioning |
|  | PC-9 | Willingness to treat dental diseases in outpatient and inpatient conditions.  | Basic methods of dental diseases treatment.  | Perform dental disease treatment. | Treatment methods of caries and non-carious lesions, endodontic diseases treatment technique, periodontal diseases management, oral mucosa diseases treatment.  | Questioning |

*\*Assessment tools: written tests (multiple choice questions, modified essay questions, short/structured essay questions); practical tests (objective structured practical examinations, oral tests, clinical tests, questioning, log books.*

**4. Discipline sections.**

|  |  |  |  |
| --- | --- | --- | --- |
| № | Competence | Section of the discipline | Content  |
| 1 | PC-5,6,8,9 | Dental caries and non-carious lesions | Patient examination methods: basic, additional, instrumental. Dental indices.Dental medical history taking.Dental deposits: supra- and subgingival, mineralized and non-mineralized. Detection of dental plaque and calculus. Oral hygiene level assessment, oral hygiene indices. Oral deposits removal, scaling and root planning. Tooth morphology and histology. Dental caries: definition, etiology, pathogenesis, classification, diagnosis. White spot lesions (non-cavitated caries): clinical features, diagnosis, non-invasive treatment. Enamel and dentine caries: clinical picture, differential diagnosis, treatment. Caries of cementum. clinical picture, differential diagnosis, treatment. Dental restorative materials. Non-carious lesions of teeth occurring before and after teeth eruption. Etiology, pathogenesis, classification, diagnosis, management. Teeth discoloration: etiology, pathogenesis, classification, diagnosis, dental bleaching. Teeth direct restoration: materials and methods, failures and complications. |
| 2 | PC-5,6,8,9 | Endodontics  | Pulp histology. Pulp chamber and root canals topography, Pulpitis: etiology, pathogenesis, classification, diagnosis.Reversible pulpitis: clinical picture, differential diagnosis, management. Direct and indirect pulp capping: materials and methods. Irreversible pulpitis: clinical picture, differential diagnosis, management. Pulp extirpation procedure, instruments and materials.Periodontal ligament. Morphology and function. Apical periodontitis: etiology, pathogenesis, classification, diagnosis. Acute apical periodontitis and periapical abscess: clinical picture, differential diagnosis, management.Chronic apical periodontitis: clinical picture, differential diagnosis, management.Temporary root canal filling: indications, materials and methods.Endodontic surgery: indications and contraindications, methods. Endodontic failures. Detection and correction. Endodontic retreatment: indications, methods. Odontogenic infection: etiology, diagnosis, management.  |
| 3 | PC-5,6,8,9 | Periodontology  | Periodontium morphology, physiology and functions. Classifications of periodontal diseases: ICD-CM, AAP classification.Examination of patients with periodontal diseases. Basic and instrumental methods, lab-tests. Periodontal indices. Etiology and pathogenesis of periodontal diseases. Local and systemic predisposing factors. Gingivitis: classification, clinical picture, differential diagnosis, management.Chronic periodontitis: classification, clinical picture, differential diagnosis, management.Aggressive periodontitis: classification, clinical picture, differential diagnosis, management.Congenital and hereditary periodontal diseases: classification, clinical picture, differential diagnosis, management.Gingival recession: etiology, classification, clinical picture, differential diagnosis, management, surgical procedures.Non-surgical and surgical treatment methods in periodontology. Local application of antibacterial solutions and gels. Systemic antibiotics intake. Flap surgery. |
| 4 | PC-5,6,8,9 | Diseases of oral mucosa.  | Oral mucosa histology and physiology. Oral mucosa pathological processes and lesions.Classifications of oral mucosa diseases.Examination of patients with oral mucosa diseases, instrumental methods, lab-tests, biopsy.Physical and chemical trauma of oral mucosa. Classification, clinical picture, differential diagnosis, management.Oral leukoplakia. Classification, clinical picture, differential diagnosis, management. Indications for surgical treatment.Viral, bacterial and fungal infections in oral cavity. Classification, clinical picture, differential diagnosis, management. Herpes viral infection. Classification, clinical picture, differential diagnosis, management. HIV infection, AIDS. Oral manifestations.Oral candidiasis. Classification, clinical picture, differential diagnosis, management. Allergic reactions in oral mucosa: anaphylactic shock, urticaria, quinke edema, erythema multiforme, contact stomatitis. Classification, clinical picture, differential diagnosis, management.Recurrent aphtous stomatitis. Etiology, pathogenesis, classification, clinical picture, differential diagnosis, management.Oral manifestations of systemic diseases: clinical picture, differential diagnosis, management. Diseases of lips and tongue: classification, clinical picture, differential diagnosis, management.Connective tissue disorders. Oral manifestations.Oral precancerous lesions. Etiology, predisposing factors, classification, clinical picture, differential diagnosis, management, signs and symptoms of malignization. Geriatric dentistry. Age-related changes in teeth, periodontium and oral mucosa. Dental treatment and oral diseases prevention in elderly people. |

**5. Distribution of discipline labor intensity and academic work in semesters.**

|  |  |  |
| --- | --- | --- |
| Academic works | Labor intensity | Labor intensity (academic hours) in semester |
| credits  | academic hours |
| 5 | 6 | 7 | 8 | 9 | 10 |
| Classroom work | 20,0 | 412 | 120 | 100 | 100 | 60 | 32 |  |
|  Lectures (L) |  | 68 | 22 | 18 | 18 | 6 | 4 |  |
|  Lab works (LW) |  |  | - | - |  |  |  |  |
|  Practical classes (PC) |  |  | - | - |  |  |  |  |
|  Clinical classes (CC) |  | 344 | 98 | 82 | 82 | 54 | 28 |  |
|  Seminars (S) |  |  |  |  |  |  |  |  |
| Self-study (S-S) |  | 210 | 60 | 50 | 50 | 30 | 20 |  |
| Guidance for intermediate attestation | 1,0 | 8 |  |  |  |  | 8 |  |
|  Examination |  |  |  |  |  |  |  |  |
| **Total**  | 21,0 | 630 | 180 | 150 | 150 | 90 | 60 |  |

5.1. Discipline sections, academic works and current assessment tools

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № | semester | Discipline sections | Academic works (academic hours) | Assessment tools |
|  |  |  | L | LW | PC | CC | S | SS | Total |  |
| 1 | 5 | Dental caries and non-carious lesions | 22 | - | - | 98 | - | 60 | 180 | Questioning, tests. |
| 2 | 6 | Endodontics | 18 | - | - | 82 | - | 50 | 150 | Questioning, tests. |
| 3 | 7 | Periodontology | 18 | - | - | 82 | - | 50 | 150 | Questioning, tests. |
| 4 | 8 | Diseases of oral mucosa.  | 10 | - | - | 82 | - | 50 | 142 | Questioning, tests. |
| 5 | 9 | Guidance for intermediate attestation |  |  |  |  |  |  | 8 | Interview |
|  |  | Total | 68 | - | - | 344 |  | 210 | 630 |  |

5.2. Distribution of lectures in semesters

|  |  |  |
| --- | --- | --- |
| № | Themes of the lectures | Academic hours |
|  |  | Semesters |
|  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Dental patient examination methods. Basic examination methods for patients with caries and non-carious lesions.  | 2 |  |  |  |  |  |
| 2 | Additional examination methods for patients with caries and non-carious lesions.  | 2 |  |  |  |  |  |
| 3 | Dental caries: etiology and pathogenesis. The role of dental plaque in caries formation.  | 2 |  |  |  |  |  |
| 4 | Dental caries: classification, clinical features, differential diagnosis. | 2 |  |  |  |  |  |
| 5 | Instrumental diagnostics of caries and non-carious lesions. | 2 |  |  |  |  |  |
| 6 | Restoration of teeth. | 2 |  |  |  |  |  |
| 7  | Errors and complications in caries diagnosis and treatment. | 2 |  |  |  |  |  |
| 8 | Non-carious lesions. Classification (ICD). | 2 |  |  |  |  |  |
| 9 | Non-carious lesions: etiology, pathogenesis, classification. Disorders of tooth development and eruption and other diseases of hard tissues of teeth. Posteruptive color changes of dental hard tissues.  | 2 |  |  |  |  |  |
| 10 | Teeth discoloration. Teeth bleaching. | 2 |  |  |  |  |  |
| 11 | Iontophoresis in caries prevention and treatment. | 2 |  |  |  |  |  |
| 12 | Introduction in endodontics. Endodontium: definition, morphology and physiology. Age-related changes in the pulp.  |  | 2 |  |  |  |  |
| 13 | Pulpitis. Etiology, pathogenesis, classification according to ICD CM.  |  | 2 |  |  |  |  |
| 14 | Acute and chronic pulpitis. Clinical features, diagnosis, differential diagnosis. |  | 2 |  |  |  |  |
| 15 | Endodontic treatment: pulp-saving methods, pulp extirpation, emergency endodontic treatment. |  | 2 |  |  |  |  |
| 16 | Periodontal ligament morphology and function. Apical periodontitis: etiology, pathogenesis, clinical picture, diagnosis. |  | 2 |  |  |  |  |
| 17 | Apical periodontitis management. |  | 2 |  |  |  |  |
| 18 | Endodontic treatment of curved and obliterated root canals. Endodontic surgery. |  | 2 |  |  |  |  |
| 19 | Errors and complications in endodontic treatment. |  | 2 |  |  |  |  |
| 20 | Physical methods in endodontics. |  | 2 |  |  |  |  |
| 21 | Periodontium: morphology, function, age-related changes.  |  |  | 2 |  |  |  |
| 22 | Etiology and pathogenesis of inflammatory periodontal diseases.  |  |  | 2 |  |  |  |
| 23 | Periodontitis in patients with systemic diseases. |  |  | 2 |  |  |  |
| 24 | Periodontal diseases classification. Gingivitis. Clinical features, diagnosis, treatment. Marginal periodontitis. Clinical features, diagnosis, treatment. |  |  | 2 |  |  |  |
| 25 | Dental examination of patients with periodontal diseases.  |  |  | 2 |  |  |  |
| 26 | Hygienic and periodontal indices. Differential diagnosis of periodontal diseases. |  |  | 2 |  |  |  |
| 27 | Basics of periodontal therapy. |  |  | 2 |  |  |  |
| 28 | Debridement. Root scaling and planning. |  |  | 2 |  |  |  |
| 29 | Non-surgical periodontal therapy. Indications and contraindications for various medications used for the treatment of periodontal diseases. Topical and systemic preparations. |  |  | 2 |  |  |  |
| 30 | Oral mucosa: morphology, function. Morphological elements of oral mucosa lesions (Primary and secondary lesion types). Pathological processes. Classification of oral mucosa lesions. |  |  |  | 2 |  |  |
| 31 | Bacterial infections of the oral mucosa: tuberculosis, syphilis, acute necrotizing ulcerative gingivitis (Vincent gingivostomatitis). Manifestations of HIV infection in the oral mucosa and lips. Etiology and pathogenesis, pathological anatomy, clinical symptoms, diagnosis, differential diagnosis, treatment. |  |  |  | 2 |  |  |
| 32 | Oral mucosa and lip lesions caused by allergic reactions. Immediate hypersensitivity: etiology and pathogenesis, clinical picture, diagnosis, differential diagnosis. |  |  |  | 2 |  |  |
| 33 | Precancerous lesions of oral mucosa. Clinical manifestations, diagnosis and treatment. |  |  |  |  | 2 |  |
| 34 | Physical methods in diagnosis of oral mucosa diseases.  |  |  |  |  | 2 |  |

5.3. Distribution of lab work in semesters

|  |  |  |
| --- | --- | --- |
| п/№ | Theme of the lab work | Academic hours |
|  |  | Semester | Semester |
|  | **Not conducted** |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Total (- AH) |  |  |

5.4. Distribution of practical classes in semesters

|  |  |  |
| --- | --- | --- |
| п/№ | Themes of practical classes | Academic hours |
|  |  | semester | semester |
|  | **Not conducted** |  |  |
|  |  |  |  |
|  |  |  |  |
|  | Total (- AH) |  |  |

5.5. Distribution of clinical classes in semesters

|  |  |  |
| --- | --- | --- |
| п/№ | Themes of clinical classes | Academic hours |
|  |  | Semester  |
|  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Dental patients examination. Examination methods for patients with caries and non-carious lesions. Medical history. Ethics and deontology. | 6 |  |  |  |  |  |
| 2 | Oral cavity preparation for restorative treatment. Dental deposits: classification. Oral hygiene level evaluation (hygienic indices). Professional hygiene. | 6 |  |  |  |  |  |
| 3 | Dental caries: etiology, pathogenesis, classification, diagnosis. | 6 |  |  |  |  |  |
| 4 | Initial caries. White spot lesions: clinical features, diagnosis, differential diagnosis. | 6 |  |  |  |  |  |
| 5 | Initial caries (white spot lesion) treatment. Remineralization of enamel: products and methods. | 6 |  |  |  |  |  |
| 6 | Caries of dentine: clinical features, diagnosis, differential diagnosis, treatment. | 6 |  |  |  |  |  |
| 7 | Caries of cementum: clinical features, diagnosis, differential diagnosis, treatment. | 6 |  |  |  |  |  |
| 8 |  Non-carious lesions: etiology, pathogenesis, classification. Hereditary disturbances of teeth formation. | 6 |  |  |  |  |  |
| 9 | Non-carious lesions of teeth, occurring before eruption: fluorosis, enamel hypoplasia and hyperplasia. Disorders of tooth numbers, size and form. | 6 |  |  |  |  |  |
| 10 | Non-carious lesions, occurring after eruption: wedge-shaped defect, erosion, excessive attrition, abrasion, hyperesthesia of teeth.  | 6 |  |  |  |  |  |
| 11 | Posteruptive color changes of dental hard tissues. Teeth bleaching. | 6 |  |  |  |  |  |
| 12 | Dental restorative materials for caries and non-carious lesions treatment. | 6 |  |  |  |  |  |
| 13 | Teeth restoration. | 12 |  |  |  |  |  |
| 14 | Instrumental method in diagnosis and treatment of caries and non-carious lesions. Fluorescent diagnostics, transillumination, laser fluorescent spectroscopy, rheodentography, electric apex-location. | 3 |  |  |  |  |  |
| 15 | Electric pulp test. Indications and contraindications, method, equipment. Electric pulp test for temporary teeth and permanent teeth in period of root formation. Electric pulp test criteria for caries, pulpitis, apical periodontitis, dental trauma, neuritis and neuralgia.  | 3 |  |  |  |  |  |
| 16 | Iontophoresis for caries and non-carious lesions treatment and prevention. Indications and contraindications, methods for localized and generalized lesions, equipment. | 3 |  |  |  |  |  |
| 17 | Errors and complications associated with treatment of caries and non-caries lesions. | 5 |  |  |  |  |  |
| 18 | Pulp histology, innervations and blood supply. Age-related changes. Pulp chamber and root canals topography. |  | 5 |  |  |  |  |
| 19 | Pulpitis. Etiology, pathogenesis, classification according to ICD CM. |  | 5 |  |  |  |  |
| 20 | Diagnosis of endodontic diseases. Examination of patients with endodontic diseases. |  | 5 |  |  |  |  |
| 21 | Reversible, irreversible acute and chronic pulpitis. Clinical features, diagnosis, differential diagnosis. |  | 5 |  |  |  |  |
| 22 | Endodontic treatment. Pulp-saving methods: direct and indirect pulp capping, pulp amputation. Indications and contraindications, methods and materials. Vital and non-vital pulp extirpation, methods and materials, steps of the procedure. Root canal preparation methods (Step Back, Crown Down).  |  | 10 |  |  |  |  |
| 23 | Diathermy in endodontic treatment. Indications and contraindications. Methods for pulpitis and apical periodontitis, equipment. |  | 5 |  |  |  |  |
| 24 | Use of ultrasonic instruments in endodontic treatment. Laser for preparation and disinfection of root canals. Photodinamic therapy and medical ozone for root canal disinfection. |  | 5 |  |  |  |  |
| 25 | Errors and complications in diagnosis and treatment of endodontic diseases. |  | 5 |  |  |  |  |
| 26 | Periodontal ligament morphology and function. Apical periodontitis: etiology, pathogenesis, classification. |  | 5 |  |  |  |  |
| 27 | Examination of patient with apical periodontitis. Examination methods, radiological examination. |  | 4 |  |  |  |  |
| 28 | Acute and chronic apical periodontitis. Clinical features, diagnosis, differential diagnosis. |  | 8 |  |  |  |  |
| 29 | Treatment plan for different forms of apical periodontitis. Root canal irrigation and disinfection. Temporary root canal filling: indication, materials. Permanent root canal filling: methods and materials. Long-term results and prognosis.  |  | 8 |  |  |  |  |
| 30 | Endodontic treatment of teeth with curved and obliterated root canals. Endodontic surgery. Corono-radicular separation, hemisection, root amputation, cystectomy, apical resection and retrograde filling. |  | 3 |  |  |  |  |
| 31 | Chronic odontogenic infection. Chroniosepsis. |  | 3 |  |  |  |  |
| 32 | Use of transcanal permanent current in endodontic treatment. Iodine transcanal iontophoresis. Transcanal anode-galvanization. Depot phoresis, Apex-phoresis. Indications and contraindications. Procedure. Equipment. |  | 4 |  |  |  |  |
| 33 | Diagnostic mistakes in apical periodontitis treatment. Errors and complications in treatment of apical periodontitis.  |  | 2 |  |  |  |  |
| 34 | Periodontium: morphology, function, age-related changes.  |  |  | 6 |  |  |  |
| 35 | Dental examination of patients with periodontal diseases. Hygienic and periodontal indices. |  |  | 6 |  |  |  |
| 36 | Instrumental examination of patients with periodontal diseases: rheography, laser Doppler flowmetry, polarography, osteometry, capillaroscopy. Fluorescent onco-markers (VisiLight examination). Gnatodynamometry.  |  |  | 6 |  |  |  |
| 37 | Periodontal diseases classification. |  |  | 3 |  |  |  |
| 38 | Etiology and pathogenesis of inflammatory periodontal diseases. Clinical features, diagnosis, differential diagnosis. |  |  | 18 |  |  |  |
| 39 | Diffuse periodontal atrophy (periodontosis). Etiology, pathogenesis. Clinical features, diagnosis, treatment. Idiopathic periodontal diseases. Hereditary and congenital disturbances.  |  |  | 6 |  |  |  |
| 40 | Gingival recession. |  |  | 6 |  |  |  |
| 41 | Radiological examination of patients with periodontal diseases. |  |  | 4 |  |  |  |
| 42 | Periodontal instruments. Scaling and root planning using manual, sonic and ultrasonic instruments.  |  |  | 12 |  |  |  |
| 43 | Basic strategies in periodontal diseases management. |  |  | 6 |  |  |  |
| 44 | Non-surgical periodontal therapy. Indications and contraindications for various medications used for the treatment of periodontal diseases. Topical and systemic agents. |  |  | 6 |  |  |  |
| 45 | Periodontal patients recall. Dynamic of periodontal diseases.  |  |  | 3 |  |  |  |
| 46 | Examination of patients with oral mucosa diseases. Oncological alertness. Oral mucosa histology and functions. Morphological elements of oral mucosa lesions (Primary and secondary lesion types). Pathological processes. Classification of oral mucosa diseases. |  |  |  | 8 |  |  |
| 47 | Oral mucosa trauma. Clinical features, diagnosis, differential diagnosis, treatment. Leukoplakia, clinical features, diagnosis, differential diagnosis, treatment. |  |  |  | 8 |  |  |
| 48 | Viral diseases of the oral mucosa and the lips. Etiology and pathogenesis, clinical features, diagnosis, differential diagnosis, treatment. |  |  |  | 5 |  |  |
| 49 | Manifestations of HIV infection in the oral mucosa and lips. Etiology and pathogenesis, pathological anatomy, clinical symptoms, diagnosis, differential diagnosis, treatment. |  |  |  | 5 |  |  |
| 50 | Bacterial infections of the oral mucosa: tuberculosis, syphilis, acute necrotizing ulcerative gingivitis (Vincent gingivostomatitis). |  |  |  | 5 |  |  |
| 51 | Mycoses (fungal infections of the oral cavity). Classification, etiology and pathogenesis, pathological anatomy, clinical symptoms, diagnosis, differential diagnosis, treatment, prevention. |  |  |  | 4 |  |  |
| 52 | Etiology and pathogenesis of allergic diseases. Stages of development of an allergic reaction. Types of allergic reactions. Clinical dental examination of patients with allergic diseases of the oral mucosa and the lips. Allergological anamnesis, diagnosis and types of allergy tests. |  |  |  | 5 |  |  |
| 53 | Exudative erythema multiforme, Stevens-Johnson syndrome. Etiology and pathogenesis, clinical features, diagnosis, differential diagnosis, treatment and prevention. |  |  |  | 4 |  |  |
| 54 | Mucocutaneous reaction (lichen planus). Etiology and pathogenesis, clinical features, diagnosis, differential diagnosis, treatment and prevention. |  |  |  | 5 |  |  |
| 55 | Diseases with an autoimmune component of pathogenesis. Recurrent aphthous stomatitis. Etiology and pathogenesis, clinical symptoms, diagnosis, differential diagnosis, treatment and prevention. Behçet syndrome, Sjögren syndrome. Etiology and pathogenesis, clinical features, diagnosis, differential diagnosis, treatment and prevention. |  |  |  | 5 |  |  |
| 56 | Pemphigus, pemphigoid. Etiology and pathogenesis, classification, clinical features, diagnosis, differential diagnosis, treatment and prevention. |  |  |  |  | 5 |  |
| 57 | Lupus erythematosus. Etiology and pathogenesis, classification, clinical symptoms, diagnosis, differential diagnosis, treatment and prevention. Dermatitis herpetiformis (Dühring disease). |  |  |  |  | 5 |  |
| 58 | Oral manifestations of exogenous intoxication. |  |  |  |  | 4 |  |
| 59 | Oral manifestations of vitamin deficiency. |  |  |  |  | 5 |  |
| 60 | Anomalies and diseases of the lips and tongue. Clinical manifestations, diagnosis, differential diagnosis, treatment |  |  |  |  | 4 |  |
| 61 | Premalignant conditions of the oral cavity, precancerous processes of the oral mucosa and lips. Obligatory and facultative precancer of the mucous membrane of the oral cavity and lips. Etiology and pathogenesis, classification, clinical symptoms, diagnosis, differential diagnosis, treatment and prevention. |  |  |  |  | 5 |  |

5.6. Distribution of seminars in semesters

|  |  |  |
| --- | --- | --- |
| п/№ | Themes of the seminars | Academic hours |
|  |  | Semester | Semester |
|  | **Not conducted** |  |  |
|  |  |  |  |
|  |  |  |  |
|  | TOTAL ( - AH) |  |  |

5.7. Distribution of self-study by types and semesters

|  |  |  |
| --- | --- | --- |
| п/№ | Type of self-study work | Academic hours |
|  |  | Semester |
|  |  | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Case history | 4 | 4 | 4 | 4 | 4 |  |
| 2 | Essay | 8 | 4 |  |  |  |  |
| 3 | Presentation |  |  | 8 | 8 | 2 |  |
| 4 | Report |  |  |  |  |  |  |
| 5 | Preparation to clinical classes | 48 | 42 | 38 | 18 | 14 |  |
|  | TOTAL (280 AH) | 60 | 50 | 50 | 30 | 20 |  |
| 6 | Preparation to intermediate attestation |  |  |  |  | 8 |  |

**6. Assessment tools**

6.1. Types of current control and intermediate attestation, assessment tools.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| №  | № of semester  | Types of control | Part of the discipline  | Assessment tools |
| Type | Number of questions  | Number of distractors |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|  | 5 | Test, questioning | Dental caries and non-carious lesions | tests | 10 | 4 |
|  | 6 | Test, questioning | Endodontics | tests | 10 | 4 |
|  | 7 | Test, ques-tioning | Periodontology | tests | 10 | 3 |
|  | 8,9 | Test, questioning | Diseases of oral mucosa. | tests | 10 | 4 |
|  | 9 | Interview | Intermediate attestation | exam | 3 | 150 |

6.2. Examples of assessment tools:

1. Choose the correct code: А-1,2,3, Б- 1,3, В -2,4, C- 4, D-all the variants

**The main property of odontoblasts is:**

1. production of collagen fibers

2. providing sensitivity of dentine

3. taking part in allergic reactions

4. production of phosphorin, phosphoprotein, alkaline phosphatase

2. Choose the correct answer

**Regenerative function is provided by:**

A. Histiocytes

B. Must cells

C. Fibroblasts

D. Osteoclasts

3. Choose the correct answer

**Transillumination is usually used**

A. to detect small pit and fissure cavities

B. to detect hidden proximal cavities

C. to assess pulp condition

D. to assess cavity depth

4. Choose the correct answer

**Biological width is the sum of:**

A. Sulcus, epithelial attachment and connective tissue attachment

B. Epithelial attachment and connective tissue attachment

C. Dento-gingival junction and attached gingiva

D. Free gingiva and attached gingiva

6.3. Assessmen tools, included in the fund of assessment tools for final state certification.

**7. Educational & methodical support of the discipline (printed editions, electronic publications, internet other network resources)**

7.1. The basic textbooks

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № | Book  | Authors | Edition | Exemplars  |
| In the library | At the department |
| 1 | 2 | 3 | 4 | 7 | 8 |
|  | Textbook of oral medicine.  | Ghom A. G. | Jaypee Brothers medical Publishers (P) ltd, 2014 | 19 | 1 |
|  | Master Dentistry.  | Coulthard P. | London: Churchill Livingstone, 2004. | 47 | 1 |

7.2. Additional editions\*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № | Book  | Authors | Edition | Exemplars |
| In the library | At the department |
| 1 | 2 | 3 | 4 | 7 | 8 |
|  | Dental caries.Textbook. | I.M. Makeeva, E.G. Margaryan, A.U. Turkina, N.Ye. Novozhilova, K.S. Babina, M.G. Arakelyan, A.V. Arzukanyan. | Moscow : Sechenov University Press, 2020 — 54 р. : il. |  | 30 |
|  | Non carious lesions of dental hard tissues. Textbook.  | I.M. Makeeva, E.G. Margaryan, A.U. Turkina, N.Ye. Novozhilo-va, K.S. Babina, M.G. Arakelyan, A.V. Arzukanyan. | Moscow : Sechenov University Press, 2020 — 44 р. : il. |  | 30 |

7.3. Tutorial guides.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| № | Name | Authors | Edition | Exemplars |
| In the library | At the department |
| 1 | 2 | 3 | 4 | 7 | 8 |
|  | Oral Mucosa Diseases.  | Ф.Ю.Даурова, И.М. Макеева, О.С. Гилева, соавт. | 2019 г., Москва, РУДН, 144 с. |  | 5 |
|  | Essentials of Operative Dentistry.  | Ф.Ю.Даурова, З.С. Хабадзе, М.К. Макеева. | ГЭОТАР-Медиа, 2019 г., 512 с.  |  | 5 |
|  | Periodontology. | Даурова Ф.Ю., М.К. Макеева, З.С. Хабадзе, соавт. | 2018, Москва РУДН, 156 с. |  | 5 |

7.4. Recommendations for the tutors

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| п/№ | Наименование | Автор (ы) | Год, место издания | Кол-во экземпляров |
| в библиотеке | на кафедре |
| 1 | 2 | 3 | 4 | 7 | 8 |
|  | Sturdevant’s Art and science of operative dentistry. 6th edition  | HO Heymann, EJ Swift, AV Ritter. |  Mosby, 2012 |  | 1 |
|  | Cohen’s pathways of the pulp. 11th edition | KM Hargreaves, L Berman. | Mosby, 2015: 928 pages. |  | 1 |
|  | Carranza’s Clinical periodontology 12th edition  | Newman MG, Takey HH, Klokkevold PR, Carranza FA. | Saunders Title, 2015 |  | 1 |
|  | Oral and maxillofacial diseases. 4th edition.  | C. Sculli, S Flint. | CRC Press, 2010 |  | 1 |
|  | Textbook of oral medicine.  | Ghom A. G. | Jaypee Brothers medical Publishers (P) ltd, 2014 | 19 | 1 |
|  | Master Dentistry.  | Coulthard P. | London: Churchill Livingstone, 2004. | 47 | 1 |

**8. Logistic support of the discipline.**

Rooms for tutorials:

1. dental offices with universal dental units;

2. class rooms for reports, presentations and discussions.

*Equipment for tutorials:*

1. dental instruments sets;

2. restorative end endodontic materials;

3. radiovisiography systems;

4. negatoscopes;

5. multimedia projectors;

6. laptop;

7. PC;

8. flash-cards with lectures presentations;

9. tutorial guides .

10. Interacive educational technologies – not used

**9.Educational technologies in an interactive form used in the process of teaching the discipline:**

**9.1. Examples of educational technologies in an interactive form:**

In accordance with the requirements of the Federal State Educational Standard, the active and interactive forms of performing classes are widely used in the educational process (computer presentation of expert materials, computer simulation; visualized test tasks; videos, analysis of specific situations, etc.) The specific weight of classes performed in interactive forms is **at least 10% of** classroom classes.

* 1. **Electronic educational resources used in the process of teaching the discipline:**

|  |  |  |
| --- | --- | --- |
| No. | Name and brief description of electronic educational and information resources (electronic publications and information databases) | Number of copies, access points |
| *1* | *2* | *3* |
| 1 | Educational portal of the First MGMU them. THEM. Sechenovahttp: //dl.sechenov.ru/ |  |
| 2 | Central Scientific Medical Library <http://www.scsml.rssi.ru/> |  |
| 3 | Library of Natural Sciences of the Russian Academy of Sciences<http://www.benran.ru/>; [http://www.benran.ru/Magazin/El/Str\_elk1.htm](http://www.benran.ru/magazin/el/str_elk1.htm) |  |
| 4 | International citation database PubMedhttp://www.ncbi.nlm.nih.gov/ |  |
| 5 | Publishing house of academic medical literature Elsevierhttp: //www.elsevier. com / |  |
| 6 | Scientific Electronic Library eLibraryhttp://elibrary.ru// |  |
| 7 | Information and educational portal for doctors Univadishttp://www.univadis.ru/ |  |
| 8 | Electronic Medical Library Consultant of a doctorhttp://www.rosmedlib.ru/ |  |

Рабочая программа дисциплины разработана кафедрой терапевтической стоматологии

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от «\_\_» \_\_\_\_\_\_\_\_\_\_\_\_\_\_ 20\_\_\_\_\_г. Протокол № \_\_\_\_

Заведующая кафедрой, профессор И.М.Макеева

*подпись ФИО*

Одобрена Учебно-методическим советом стоматологического факультета

«\_\_\_»\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_20\_\_\_\_\_\_ г. Протокол № \_\_\_\_\_\_\_\_\_\_\_\_\_\_

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Training program is developed by therapeutic dentistry department

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Approved at the session of the therapeutic dentistry department

«\_\_» \_\_\_\_\_\_\_\_\_\_\_\_\_\_ 2018 . Protocol № \_\_\_\_

Chief of the department, professor I.M. Makeeva

*signature*

Approved by educational & methodical council of the dental faculty

«\_\_\_»\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_2018 г. Protocol № \_\_\_\_\_\_\_\_\_\_\_\_\_\_

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